

CENTRAL INTELLIGENCE AGENCY
INFORMATION REPORT

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SUBJECT	Production of the Hettstedt Lead Refinery	DATE DISTR.	3 March 1955
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This is UNEVALUATED Information

THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.
THE APPRAISAL OF CONTENT IS TENTATIVE.
(FOR KEY SEE REVERSE)

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1. General

The Hettstedt Lead Refinery (Bleihütte Hettstedt) is a subsidiary of the Mansfeld Combine (Mansfeld-Hütten-Kombinat "Wilhelm Pieck"). The refinery has a present labor force of about 620 persons, of whom about 120 are members of the SED party. The refinery produces principally lead, iodine, rhenium, zinc sulphate, and cadmium cement (Zement-Cadmium).

2. Production of Lead

The planned monthly quota of lead production is 283 tons. This quota was not fulfilled in the first quarter of 1954. In the second quarter it was fulfilled by 101 percent; in the third quarter, by 108 percent. Commercial lead, produced in blocks of 50 kilograms each, is delivered principally to Kabelwerk Oberspree and to Transformatorenwerk Oberschoeneweide.

3. Production of Zinc Sulphate

The planned monthly quota of zinc sulphate production is about 100 tons.

4. Production of Rhenium

The planned monthly rhenium quota of 12.5 kilograms has been fulfilled. Rhenium is derived from fine dust accumulating in the process of refining of copper. During the smelting of copper ore, rhenium is precipitated along with lead and iodine, in the so-called flue channels (Kanalisation). The Hettstedt refinery is reputed to be the only refinery in the world in which rhenium is extracted in this form. This process was perfected by experiments over several years undertaken by Dipl. Ing. Lindemann (fmu), technical chief of the enterprise, Dr. Kantasch (fmu), chief geologist, and the deceased Dr. Wagemann (fmu). Rhenium is isolated in perhenate form (crystals) and

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- 2 -

25X1

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also as hard metal. Rhenium crystals come in glass tubes. Metallic rhenium is cast in block-molds about 20 x 2 centimeters.1 The entire rhenium output goes to the USSR.

The rhenium installation, in which nine men are employed (almost all SED members), is directly administered by the Technical superintendent of the plant, Dipl. Ing. Lindemann (fnu), a non-party man, inventor of the process for extracting rhenium.

1.  Comment: Since the melting point of rhenium is 3120° - 3160° C., it seems hardly probable that the 20 x 2 cm. blocks were "cast". If blocks of rhenium were in fact produced, they may have been formed by sintering the compressed metal powder according to procedures common to powder metallurgy technology. For comparison purposes, the melting point of tungsten (wolfram) is 3370° C.

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